

Installation of Zeek on Ubuntu 20

Version 20220518

- Deploy a VM from "Templ_Ubuntu_Server_20.04"
- Make sure the network is connected to something
- Make sure your deployed VM received an IP-address from DHCP or otherwise set a manual IP-address (see instruction in the login banner) and has Internet access
- Now perform the following:
`sudo apt update`
`sudo apt upgrade`
- In next step, we enable package installation from an external source (connect to your VM with SSH to copy-and-paste) by copying the following oneliners (make sure they stay oneliners when copying and pasting!):

```
echo 'deb
http://download.opensuse.org/repositories/security:zeek/xUbuntu_20.04/ /'
| sudo tee /etc/apt/sources.list.d/security:zeek.list
```

```
curl -fsSL
https://download.opensuse.org/repositories/security:zeek/xUbuntu_20.04/Release.key | gpg --dearmor | sudo tee
/etc/apt/trusted.gpg.d/security_zeek.gpg > /dev/null
```

```
curl -fsSL
https://download.opensuse.org/repositories/security:zeek/xUbuntu_20.04/Release.key | gpg --dearmor | sudo tee
/etc/apt/trusted.gpg.d/security_zeek.gpg > /dev/null
```

```
sudo apt update
sudo apt install zeek-lts
```

- When asked for Postfix mail configuration, choose "no configuration"
- Now execute
`export PATH=/opt/zeek/bin:$PATH`
- Now follow the quick start guide steps 1-2-3
<https://docs.zeek.org/en/current/quickstart/index.html> and edit the following config files according your own network (private VLAN):
 - `sudo nano /opt/zeek/etc/node.cfg`
`interface=ens160`
 - `sudo nano /opt/zeek/etc/networks.cfg`
`only your local LAN or DMZ`
 - `sudo nano /opt/zeek/etc/zeekctl.cfg`
`LogRotationInterval = 86400`
`MailConnectionSummary = 0`
`MailHostUpDown = 0`
- Continue the quick start guide and start the control application:
 - `sudo /opt/zeek/bin/zeekctl`
 - `check`
 - `deploy`
 - `status`
 - `exit`
- Note: If there are errors after `deploy`, you can view the details with the `diag` command. If started successfully, the Zeek instance will begin analyzing traffic according to a default policy and output the results in directory `/opt/zeek/logs/current` and it keeps running after exiting the control application
- If zeek started properly you can access the log files from the command line:
 - `sudo chmod 777 -R /opt/zeek/logs`
 - `sudo chmod 777 -R /opt/zeek/spool`
 - `cd /opt/zeek/logs/current`

- Now browse the log files and analyse some of them. Live logging can be viewed with the tail -f command (stop with CTRL-C). You should see all machines traffic being analysed in separate log files and all connections should appear anyway in the conn.log (= Flow Logging):
 - `tail -f /opt/zeek/logs/current/conn.log`
- Check all logfiles and explain what you see. Determine if the entries in weird.log and notice.log can be regarded as false-positives. Show relevant log lines (or screenshots) in your portfolio. *Note: Check the "Browsing Log Files" section of the mentioned quick start guide for more explanation about the (other) log files.*

Resources:

Instruction: <https://kifarunix.com/install-zeek-on-ubuntu/>

Software repository: <https://software.opensuse.org/download.html?project=security%3Azeek&package=zeek-lts#manualUbuntu>

Installation of Zeek: <https://docs.zeek.org/en/current/install/install.html>

Quick Start Guide for Zeek: <https://docs.zeek.org/en/current/quickstart.html>